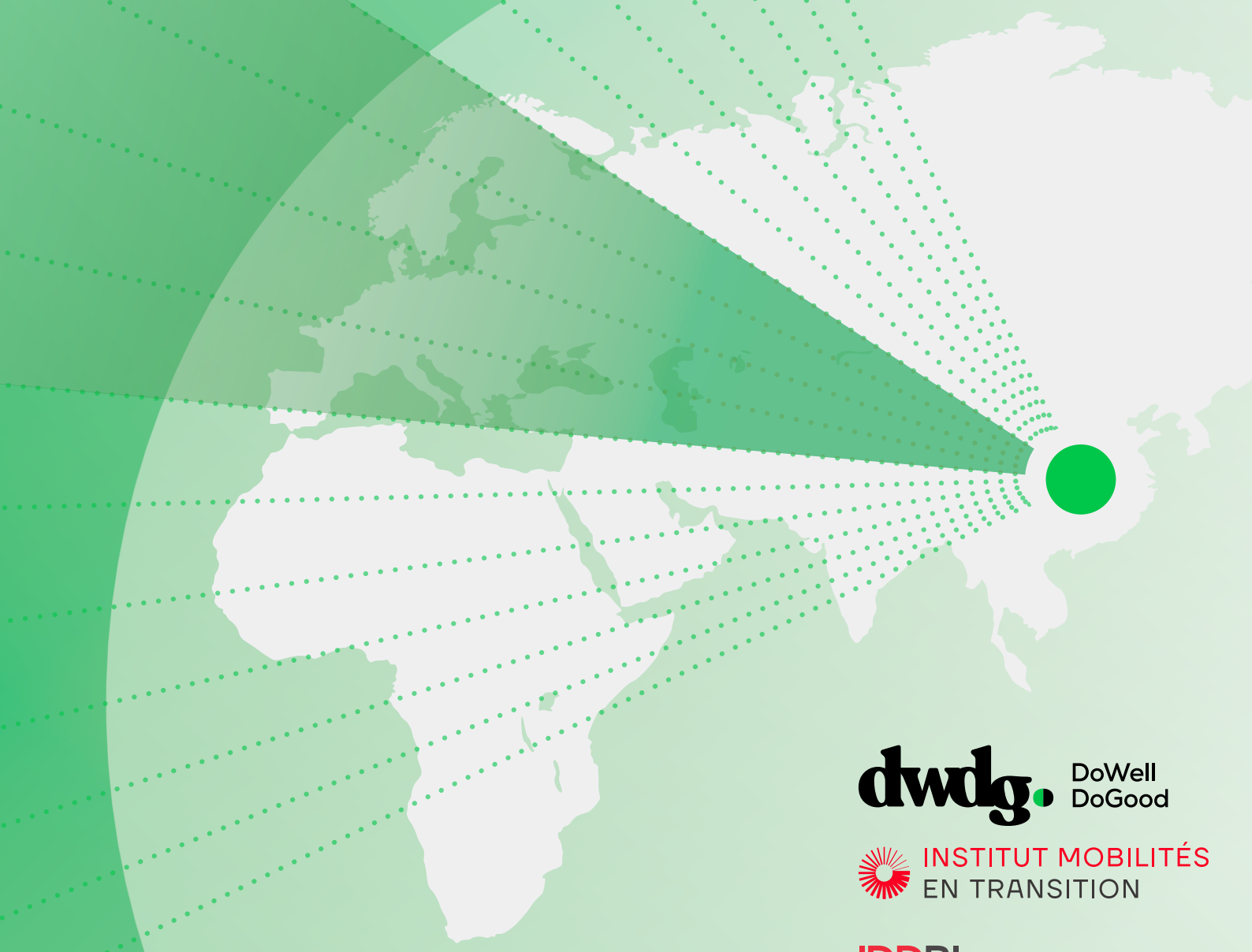
EUROPE-CHINA
BETWEEN COMPETITION AND COOPERATION

New threats and stakes for the automotive industry



DoWell DoGood

INSTITUT MOBILITÉS EN TRANSITION

IDDRI
SUSTAINABLE DEVELOPMENT & INTERNATIONAL RELATIONS

SUMMARY

LIST OF FIGURES

EXECUTIVE SUMMARY

This work is a collaboration between IMT-Iddri and Do Well Do Good in the context of the current discussion and Strategic Dialogue at the European level around the review of industrial policy applied to key sectors, as well as its trade and industrial cooperation with China in particular. It examines the evolving industrial relations between Europe and China in the automotive sector, with particular attention to how market dynamics have been reshaped over the past decade.

This analysis is grounded in empirical observation: it systematically tracks market shares, production capacities, plant footprints, and the strategic trajectories of European and Chinese firms operating across both geographies. Objectivizing these dynamics is especially relevant considering that the automotive industry is the European Union's largest manufacturing sector, employing 12.7 million people and contributing to 7% of GDP (ACEA, 2024).

The paper thus proposes a three-step analytical framework. First, the focus extends beyond the automotive sector to examine developments in China across a range of industries - including telecommunications, retail, household appliances, and business-to-business services - to distill common structural patterns of industrial competition and market reconfiguration. Second, these insights are applied to the trajectory of China's automotive industry, emphasizing the rise of Chinese original equipment manufacturers (OEMs) and their competitive strategies, particularly in electric vehicles and batteries. Then, the analysis is mirrored to reflect the situation in Europe. Overall, it describes the shift of China from being primarily a growth market to becoming a direct competitor. Against this backdrop, the study concludes by outlining a non-exhaustive set of policy and strategic options available to the European Union. These options are conceived as combinable and sequenced measures designed both to safeguard the European market and to reinforce domestic industrial capabilities, thereby anchoring value creation within the Union.

Key messages

CHINESE FIRMS HAVE MOVED FROM LEARNING TO LEADING.

For three decades, China was a pivotal growth market opportunity. Foreign champions in phones, retail, and appliances piled in, won market shares early, and scaled up fast. Progressively, the local ecosystem has moved upmarket: some agile domestic players absorbed the know-how of European actors, improved quality and cost, and subsequently overtook incumbents and expanded abroad as global leaders - as seen in home appliances for instance, where top Chinese brands lifted their global sales share from 16% in 2013 to 30% in 2022, nearly doubling in less than ten years. Although this shift happened faster and was more visible in B2C than in B2B, the trend remains consistent: Chinese local firms managed to successfully climb the value chain and consolidate domestic and global leadership over time.

THE AUTOMOTIVE INDUSTRY IS RAPIDLY EXPERIENCING THE SAME SHIFT.

China has become the world's automotive center of gravity, accounting for roughly one-third of global vehicle production in 2024 and nearly 80% of global EV battery output. Local OEMs, powered by electrification, have seized domestic market share, with Chinese brands representing 65% of total car sales in 2024, compared to 36% in 2020. Furthermore, Chinese suppliers have closed the technology gap and moved up the value chain, now dominating key components; CATL leads power batteries with around 45% of market shares in China, BYD follows with about 36%, Desay SV leads autonomous driving chips with roughly 27%, and Fuyao ranks first in auto glass at about 66%. The concentration of capabilities across the value chain has made the domestic ecosystem largely self-sufficient. Therefore, China's automotive market is characterized by a high number of players, thin margins and under-used capacity, leading to the aim to accelerate growth abroad. This is reinforced by the indirect support given by super-capacities in materials (steel, aluminum, plastics) supplied by Chinese State-Owned Enterprises (SOEs).

EUROPE IS NOW A PREFERRED DESTINATION FOR CHINESE AUTOMOTIVE COMPANIES AS IT ALLOWS FOR HIGHER MARGINS AND PROFITABILITY.

European imports from China have accelerated at an exceptional pace, climbing from €2 billion in 2020 to €9.7 billion in 2022 and €12.6 billion in 2024, even as new tariffs came into force. Chinese companies are also establishing operations in Europe, reusing legacy European plants, building new ones, and expanding their supplier networks across the EU and nearby countries. This shift is being operated by both OEMs and suppliers, marking a transition from exports-only to on-the-ground production for the European market, primarily for assembly. In parallel, the European car trade surplus with China tightened from €17 billion in 2020 to €5 billion in 2023 and €1.8 billion in 2024.

What policy responses could the EU pursue to protect its market and foster capability-building?

This analysis showcases that Europe currently stands in a similar position to the one of China in the early-2000s, during which it underwent a "protect-and-learn" phase. However, unlike China, the EU is not starting from scratch, it rather faces a different type of challenge to guarantee its industrial survival. In fact, Europe needs to rebuild competitiveness, protect its industry temporarily to learn, and anchor strategic value chains. In this context, a non-exclusive set of actions or options to combine and sequence over time is available for EU decision makers.

1. Establish a "Made in Europe" label to anchor industrial localization and circularity

The EU should introduce a "Made in Europe" label that defines when a vehicle, battery pack, cell, or other strategic component can claim European origin and ensure that public support aligns with strategic autonomy and just transition objectives. This label would condition eligibility for public support mechanisms - including CAPEX and OPEX aid, preferential energy pricing, and access to demand-side incentives in lead markets. Local content requirements under the label could be progressively integrated into environmental and social policy tools, such as corporate fleet mandates, public procurement criteria, social leasing schemes, circularity indexes used in fiscal instruments, and the CO_2 standards trajectory. The label's definition should evolve over time, with increasingly stringent localization criteria for downstream products.

The "Made in Europe" label should apply at the vehicle level, with separate criteria for strategic components and importantly for batteries. OEM-level, sales-based approaches would dilute the label's purpose, weaken its integration into fiscal tools, and shift responsibility from industrial decision-makers to commercial teams. Clear, model-specific rules are essential to anchor value creation in Europe through engineering, procurement, and manufacturing.

To ensure transparency and coherence, the definition of European "content" can draw on existing Rules of Origin (RoO) frameworks used in preferential trade agreements. Embedding circularity principles within the label, for both the vehicle and strategic components such as recycled material use and end-of-life recovery, will align industrial localization with the EU's broader green and circular transition goals.

2. Define a more coordinated sectoral Foreign Direct Investment (FDI) and Joint Ventures (JVs) framework, aligned with strategic autonomy, and just transition goals

A more coordinated European FDI and JV framework could ensure that foreign investments and partnerships in strategic sectors, such as batteries, contribute to European industrial capacity rather than displace it. A sectoral FDI framework for the automotive sector must be developped to avoid fragmentation between Member States and address the stake of the issue for the sector. The future Industrial Accelerator Act (IAA) provides a key opportunity for this framework, which must establish clear rules on intellectual property (IP) management, technology transfer, and R&D localization, ensuring consistency across Member States. The screening should ensure that value and know-how is localized in Europe, but remain open to international partners, encouraging collaboration with global leaders - not only from China but also from South Korea, Japan, and beyond - where such partnerships strengthen European know-how and industrial capacity.

Such alignment of FDI, local content, and industrial-policy tools mirroring global practices creates value through access to EU lead markets while ensuring a level playing field between European and international actors on environmental and social objectives.

3. Rebalance tariffs as a temporary strategic shield and negotiation lever

To safeguard emerging strategic industries and maintain fair competition, the EU could temporarily rebalance tariffs on vehicles and critical components. Adjusted duties would narrow landed-price gaps, providing a time-bound protective framework that enables European manufacturers to scale and learn while remaining consistent with international trade commitments.

1

INDUSTRIES BEYOND AUTOMOTIVE IN CHINA

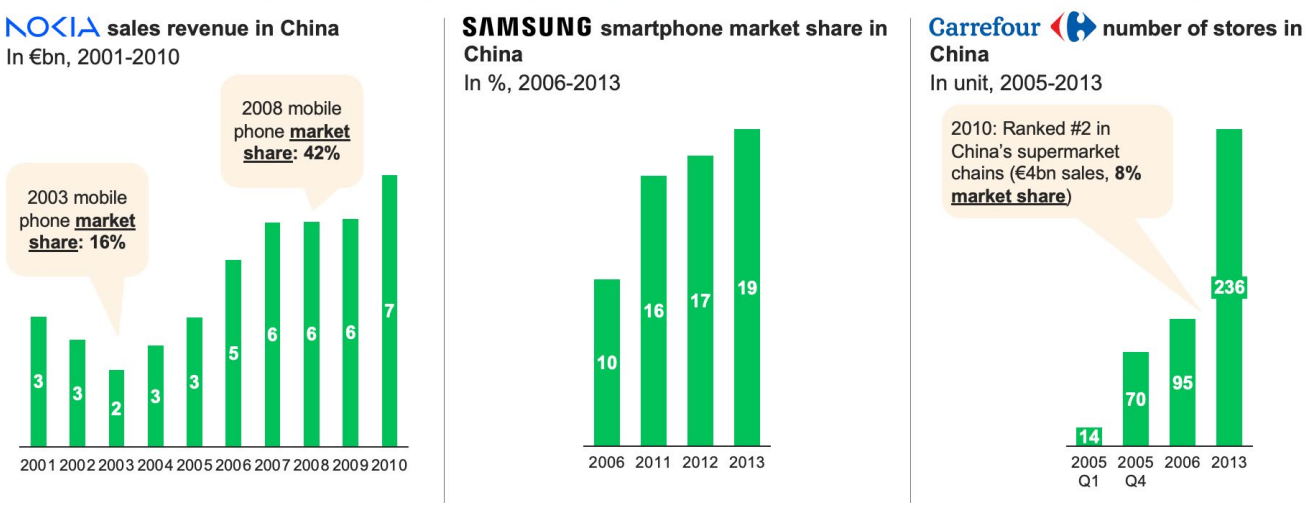

LYNK&CO
涂装漆面检查

1.1 Rise and decline of foreign B2C champions

In the early 2000s, China coupled explosive market growth with a post-WTO opening to foreign investment. Urbanization, rising incomes, modern retail, and nationwide mobile networks expanded the consumer base, allowing global brands to scale up quickly and leverage their reputations. Consequently, several foreign B2C champions led key market categories for over a decade.

Against this backdrop, Nokia's revenues in China grew from around €3 billion in the early 2000s to nearly €7 billion by 2010, with market share exceeding 40% in 2008. Samsung followed a similar trajectory in smartphones, capturing close to 20% of the market by 2013. Carrefour, for its part, expanded rapidly from just a dozen stores in 2005 to more than 230 by 2013, becoming the second-largest retailer in the country with about 8% market share in 2010.

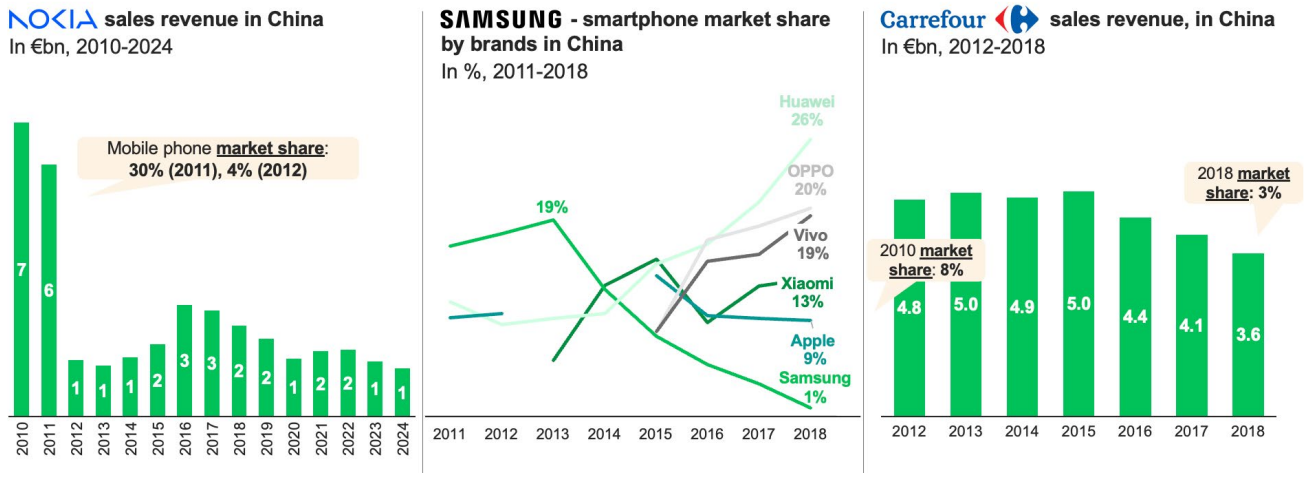
FIGURE 1 - Rise of Nokia, Samsung, & Carrefour in China 2001-2013 - revenues (€bn), market shares (%) and stores (unit)



Sources: Nokia, Sina, Zhihu, CKGSB Knowledge

Yet, this dominance unraveled within a few years. As an example, Nokia held nearly one third of the Chinese handset market in 2011, but within a year its share collapsed to barely 4%, as Android and iOS displaced Symbian and Chinese brands accelerated their product cycles. Samsung, once the symbol of aspirational smartphones in China, saw its share fall from 19% in 2013 to just 1% in 2018, crowded out by Huawei, OPPO, Vivo, and Xiaomi, which together controlled more than two-thirds of the market by then. Carrefour's decline was slower but equally telling: after reaching €5 billion in annual revenue in the mid-2010s, sales fell below €4 billion by 2018, and its market share shrank to around 3%. By 2019, the French retailer had sold most of its Chinese operations to Suning, and by 2024 only four stores remained.

FIGURE 2 - Decline of Nokia, Samsung, & Carrefour in China 2010-2018 - revenues (€bn), market shares (%)



Sources: Sina, Wallstreet CN, Carrefour, CKGSB Knowledge

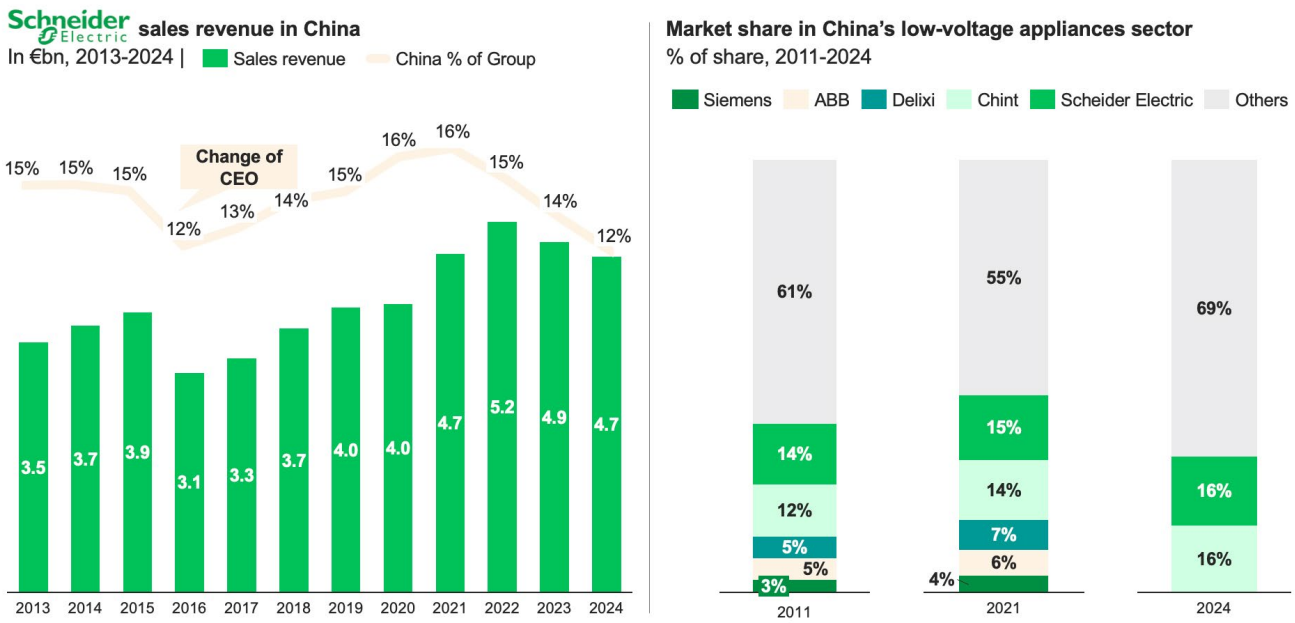
The common thread is that foreign incumbents initially scaled rapidly, but once domestic challengers reached critical mass, their decline was abrupt. Local firms proved more agile in adapting to Chinese consumer preferences, in leveraging digital channels, and in sustaining the pace of innovation. What looked at first like durable leadership proved fragile when confronted with the combined force of technological shifts and local ecosystems rising to maturity.

1.2 A more gradual erosion of foreign B2B champions

This pattern is not confined to consumer-facing industries. In B2B markets, traditionally seen as more resilient, foreign multinationals have also come under pressure. Schneider Electric illustrates this erosion. Its revenues in China rose steadily from just over €3.7 billion in 2014 to more than €5 billion by 2022, making China one of its largest single-country markets and accounting for up to 16 % of global sales. But by 2024, sales had slipped back below €5 billion, and China's weight in group revenues declined to around 12 %.

Additionally, market shares in low-voltage equipment confirm the competitive squeeze. Schneider still holds close to 16% of the Chinese market, but domestic rival Chint has caught up with about 15.5%, after years of steady growth. Other local players such as Delixi are also strengthening their positions.

FIGURE 3 - Schneider Electric in China 2013-2024 - revenues (€bn) and low-voltage market shares (%)



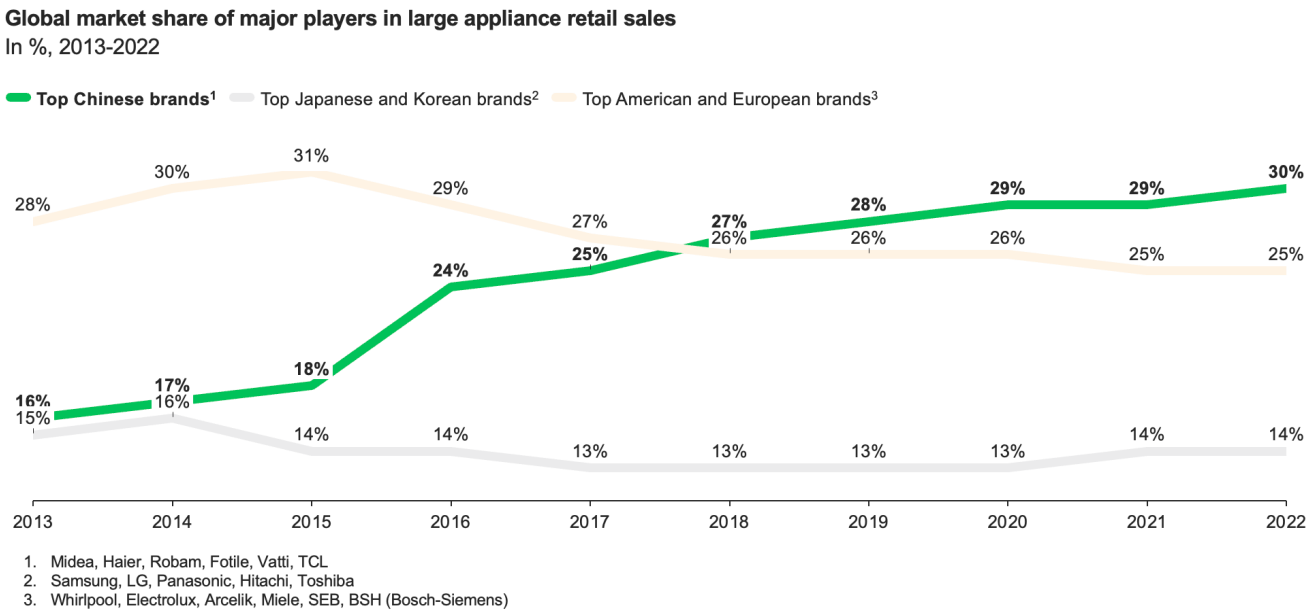
Sources: Schneider Electric, Cinda Securities

Behind these figures lies the same structural dynamic: the rise of capable domestic competitors, benefiting from large-scale deployments, policy alignment, and preferential support - including privileged access to public procurement and tenders - alongside tight integration with local supply chains. Even in capital-intensive B2B segments, foreign incumbents are being challenged on both price and technological performance.

1.3 From local to global Chinese champions

After consolidating leadership at home, several Chinese groups have begun to anchor themselves internationally, combining exports with acquisitions, local design and R&D, and distribution buildouts. The home appliances industry is a notable example. In 2013, top Chinese brands represented about 16% of global large-appliance sales; by 2022, their share had nearly doubled to 30%, while top European and American brands declined from around 30% to 25% over the same period. Top Japanese and Korean brands, after losing ground for much of the decade, stabilized at around 14%.

FIGURE 4 - Global market share of major players in home appliance brands 2013-2022, (%)



1. Midea, Haier, Robam, Fotile, Vatti, TCL
2. Samsung, LG, Panasonic, Hitachi, Toshiba
3. Whirlpool, Electrolux, Arcelik, Miele, SEB, BSH (Bosch-Siemens)

Source: Xueqiu

This expansion has not been limited to exports. Haier acquired GE Appliances in 2016 for over $5 billion, Midea took control of Toshiba's appliance division the same year, and Philips' domestic appliances business was sold to a Chinese consortium in 2021. At the same time, these groups invested in design, R&D, and distribution outside China, building a global footprint to match their scale at home. The trajectory is clear: Chinese companies no longer compete as low-cost manufacturers, but as integrated global players capable of reshaping industry structures worldwide.

The lesson extends well beyond home appliances. The model of learning domestically, scaling rapidly, and then expanding globally is now visible across multiple sectors. It is precisely this trajectory that is now unfolding in the automotive industry.

2

CHINA'S AUTOMOTIVE MARKET DYNAMICS


现代生产性服务业加
MODERN PRODUCER SERVICES DEVELOPING AT AN ACCE
CHONGQING
软件和信息服务规模体系快速成长
THE SOFTWARE AND INFORMATION SERVICE SECTOR GROWING RAPIDLY IN SCALE AND STRUCTURE
工业设计服务水平
AVATR

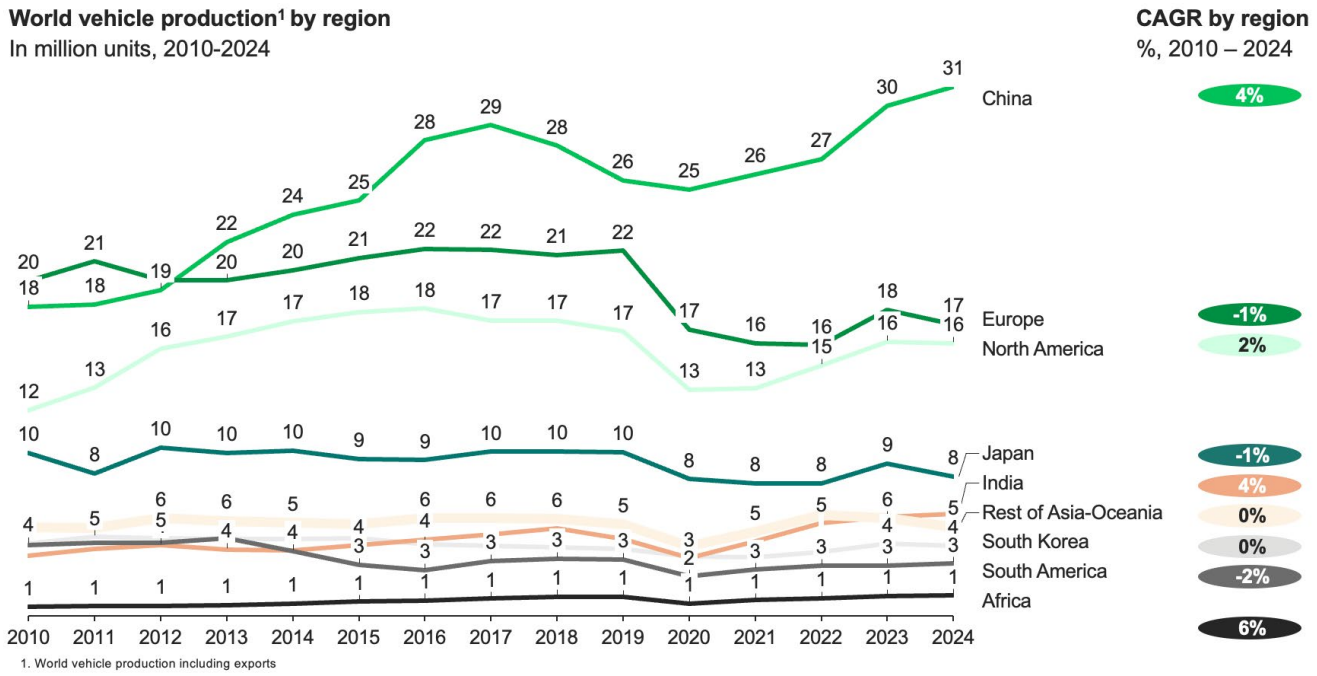
2.1 China's rise as the world leading automotive market and manufacturing hub

Over the past fifteen years, China has shifted from fast follower to system anchor for the global automotive industry. Scale in both output and domestic demand now underpins supplier networks, model cycles, and investment decisions across regions.

Chinese vehicle production

China has become the beating heart of the global automotive industry. Vehicle production rose from 18 million units in 2010 to more than 31 million in 2024, representing one-third of global output. This expansion corresponds to an average growth of around 4% per year, at a time when most legacy regions were either stagnating or declining. Europe contracted by about 1% annually, Japan also declined, and South Korea remained broadly flat, while North America grew modestly at 2% per year. Only India matched China's growth rate of 4%, but on a much smaller scale, producing fewer than 10 million vehicles in 2024.

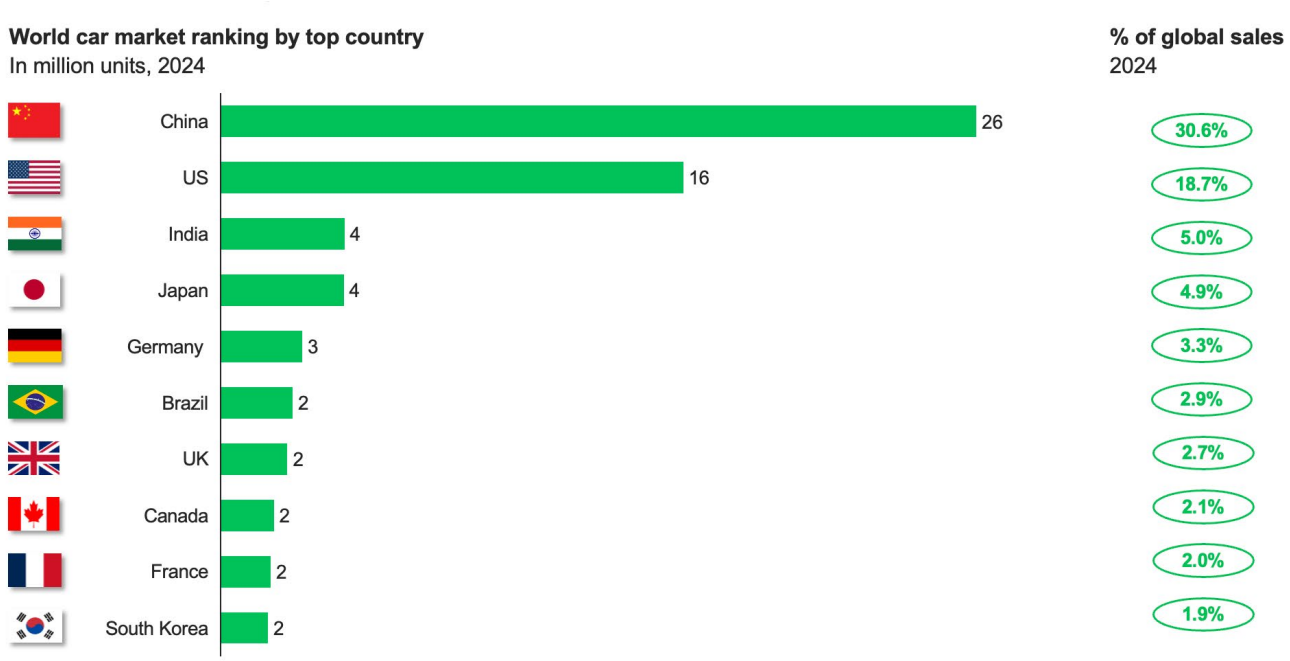
FIGURE 5 - World vehicle production by region 2010-2024, (million units)



Source: OICA

Moreover, Western manufacturers are turning to China not merely as a market, but as a laboratory of efficiency. Renault's recent experience illustrates this shift vividly: the new *Twingo*, developed in record time through partnerships with Chinese suppliers, embodies a strategic attempt to absorb local best practices and reintroduce them into European production systems. Far from signaling a simple relocation of value chains, such initiatives reflect a form of "reverse learning," whereby European firms seek to internalize the agility, integrated design processes, and cost discipline that have propelled Chinese automakers to global leadership.

FIGURE 6 – Light vehicle sales in top countries 2024, (million units)



Source: Focus2Move

Chinese domestic demand

On the demand side, China has consolidated its position as the largest car market in the world. In 2024, domestic sales reached 26 million vehicles, ahead of the United States at 16 million and far outstripping other major markets such as India (4 million), Japan (4 million), or Germany (3 million). China alone accounts for 31% of global sales, nearly double the US share (19%). Over the last fifteen years, this surge has progressively re-centered the global industry: while Europe, Japan and North America accounted for most registrations in 2009, by 2024 China has become the indispensable anchor for both production and consumption. This dual role - at once the largest production base and the largest market - has reconfigured global strategies. Foreign OEMs increasingly relied on their Chinese operations to sustain global sales, margins, and R&D funding. Simultaneously, the domestic market's scale created a fertile ground for Chinese brands to grow, consolidate capabilities, and ultimately challenge incumbents both at home and abroad.

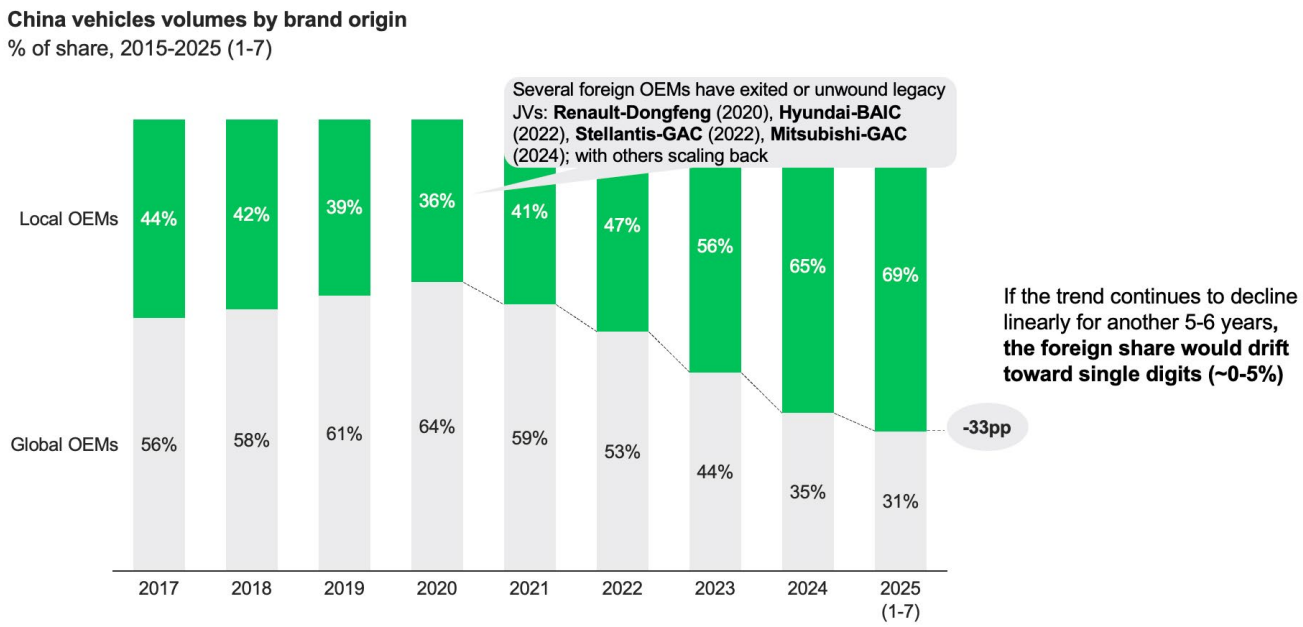
2.2 China's domestic market realignment

The central feature of China's automotive market today is the reversal of balance between foreign and domestic OEMs. For years, global manufacturers dominated through JV and a privileged position in the premium and mid-market segments. But since 2021, the dynamic has flipped. In parallel, supplier dynamics are shifting more slowly: localization is advancing across electric vehicle (EV)-critical components, and Chinese players are beginning to lead in selected segments.

Vehicle manufacturers: share and electrification edge

In 2020, foreign brands still held 64% of the Chinese market. In 2025, between January and July their share fell to 31%, a drop of 33 percentage points in just five years. Several global OEMs have exited or wound down major JVs: Renault terminated the Dongfeng Renault passenger-car JV in 2020; Stellantis liquidated GAC Stellantis in 2022; Mitsubishi ended production at GAC Mitsubishi and withdrew in 2023; and Hyundai has progressively closed and sold Beijing Hyundai plants since 2019. Local OEMs now represent close to 70% of the market, and the trend suggests foreign participation could drift into single digits within another five to six years if current trajectories persist.

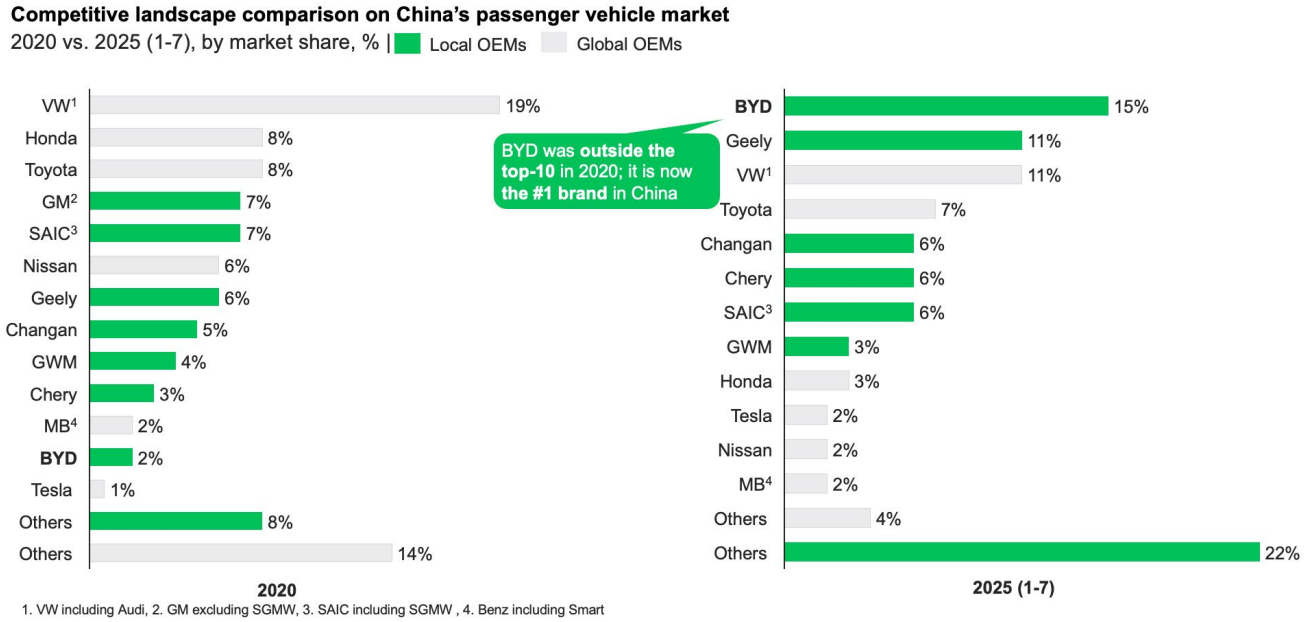
FIGURE 7 - Share of passenger vehicle sales of local vs global OEMs in China 2017-2025 (1-7), (%)



Source: CAAM

The composition of market leaders has been transformed. BYD, absent from the top ten as recently as 2020, has risen to become China's number one carmaker with 15% share in 2025. Other domestic players also expanded rapidly between 2020 and 2025: Geely grew from 6% to 11%, and Chery from 3% to 6%. On the foreign side, Volkswagen, long the leading brand, has seen its share fall from 19% in 2020 to 11% in 2025, while other legacy names - Honda, Toyota, Nissan - have also lost ground.

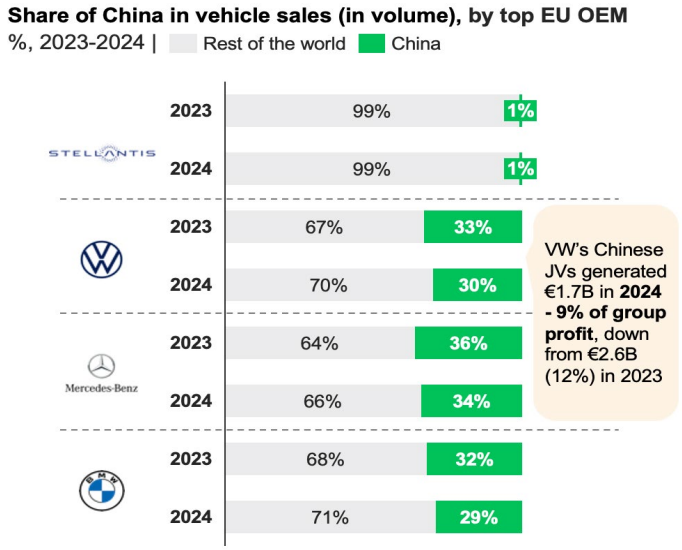
FIGURE 8 - Share of passenger vehicle sales in China, by OEM, 2020 vs. 2025 (1-7), (%)



Source: CPCA

Yet China remains a crucial revenue and profit pillar for several European groups. In 2024, China represented 30% of Volkswagen's sales, 34% of Mercedes-Benz's, and 29% for BMW's. Volkswagen's Chinese JV generated roughly €1.7 billion of profit, about 9% of group total, down from €2.6 billion and 12% in 2023.

FIGURE 9 - Share of China in total vehicle sales (in volume), by top European OEM 2023-2024, (%)



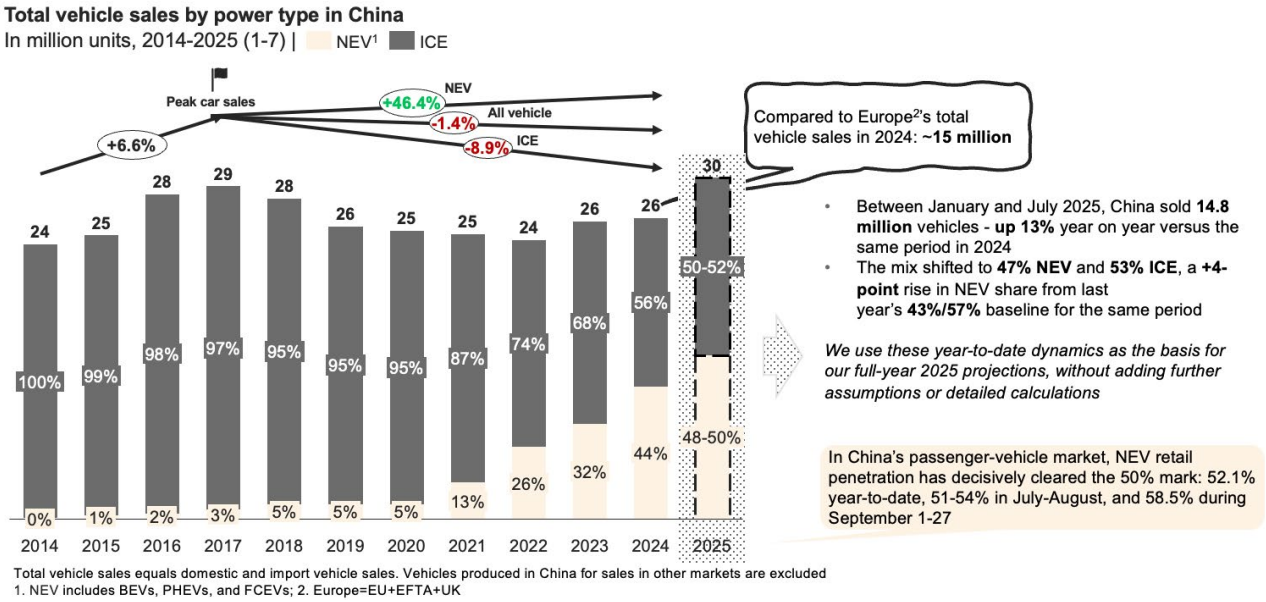
Sources: Stellantis, Volkswagen, Mercedes-Benz, BMW

Electrification has been a major - though not the only - driver of China's market realignment. Policy set the pace: national purchase subsidies, tax exemptions, and a rapid charging roll-out boosted demand, while local packages - discounted land and utilities, tax holidays and credits, concessional and guaranteed loans, and targeted grants for plants and R&D - drew investment and scaled output.

The magnitude of these subsidies is difficult to assess - fragmented, locally administered, and often opaque - but their cumulative effect has been decisive.

Battery policy also steered early technology choices through energy-density criteria up to 2020. In parallel, the shift to electric was coupled with an "intelligent connected" push: Chinese startups brought richer infotainment, faster electronic architectures, and driver-assistance to market ahead of most legacy rivals, reshaping perceptions of modernity between 2020 and 2024. Together, these forces let Chinese groups pivot earlier and scale faster, closing legacy gaps in internal combustion engine (ICE) technology and tilting consumer preference toward domestic brands. Across all vehicles, new electric vehicles (NEVs) rose from near zero in the mid-2010s to 44% of total sales in 2024 and are likely to reach 48-50% in 2025; in passenger cars alone, penetration has already exceeded 50%.

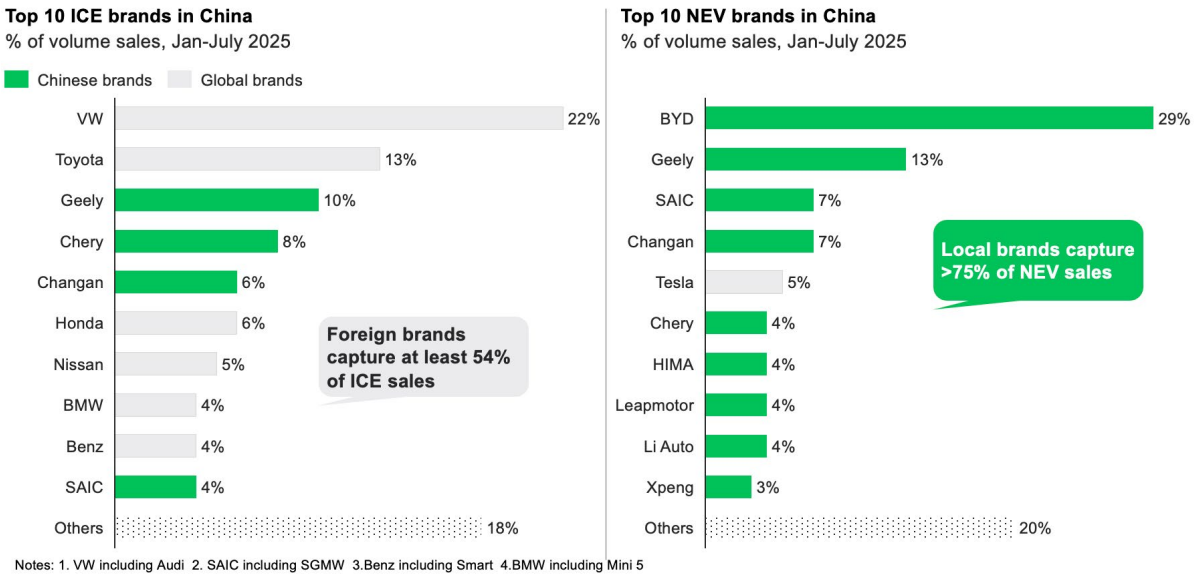
FIGURE 10 - Total vehicle sales by power type in China 2014-2025 (1-7), (million units)



Sources: CAAM, ACEA, DWDG analysis

Among NEVs sold in January-July 2025, local brands captured more than 75%, compared to foreign brands retaining over half of the shrinking ICE segment.

FIGURE 11 - Market share breakdown of top ICE brands vs. top NEV brands in China 2025 (1-7), (%)



Notes: 1. VW including Audi 2. SAIC including SGMW 3.Benz including Smart 4.BMW including Mini 5

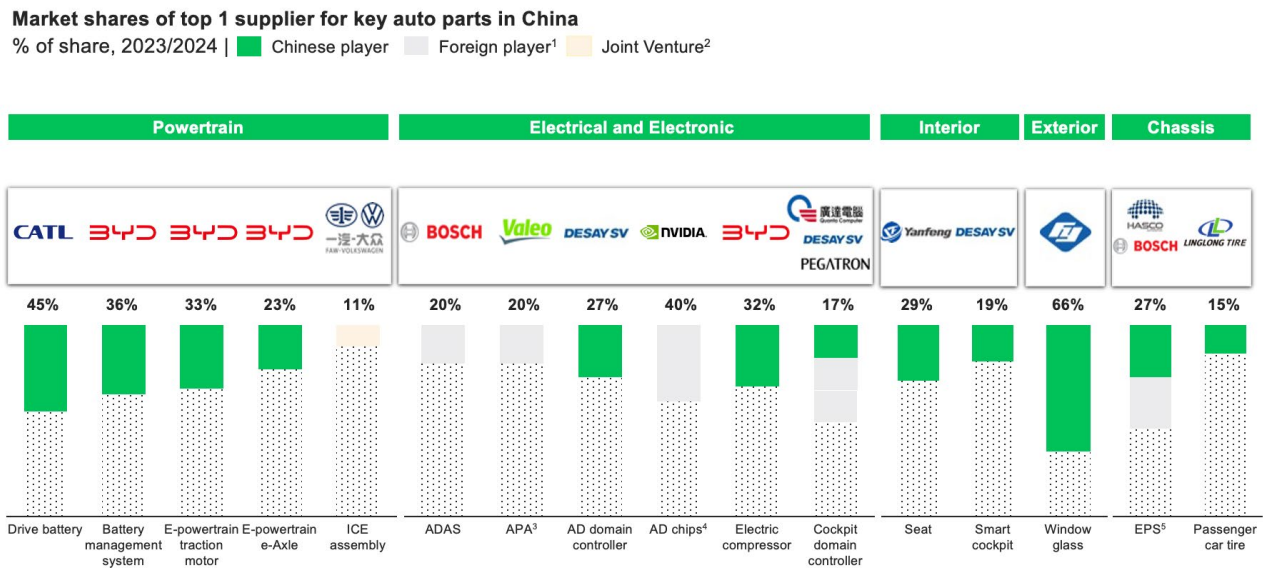
Source: CPCA

The implications are clear: foreign OEMs are not just losing market share - they are increasingly confined to declining market segments. Domestic champions, by contrast, dominate the growth frontier, building brand equity and technological leadership in electrification.

Supplier tiers: EV-stack leadership and broader module gains

Beneath the OEM flip, supplier dynamics have shifted in parallel, especially in EV-critical systems. In e-powertrain, Chinese champions dominate most sub-segments: among the top five suppliers, local firms lead drive batteries with CATL out front, and hold strong positions in battery-management systems, e-motors, and e-axles, with BYD present across several of these categories. Beyond the EV stack, Chinese groups also lead in mainstream modules: Yanfeng in seats, Fuyao in automotive glass, and Linglong in passenger-car-tires.

FIGURE 12 - Market shares of top 1 supplier for key automotive parts in China 2023/2024, (%)



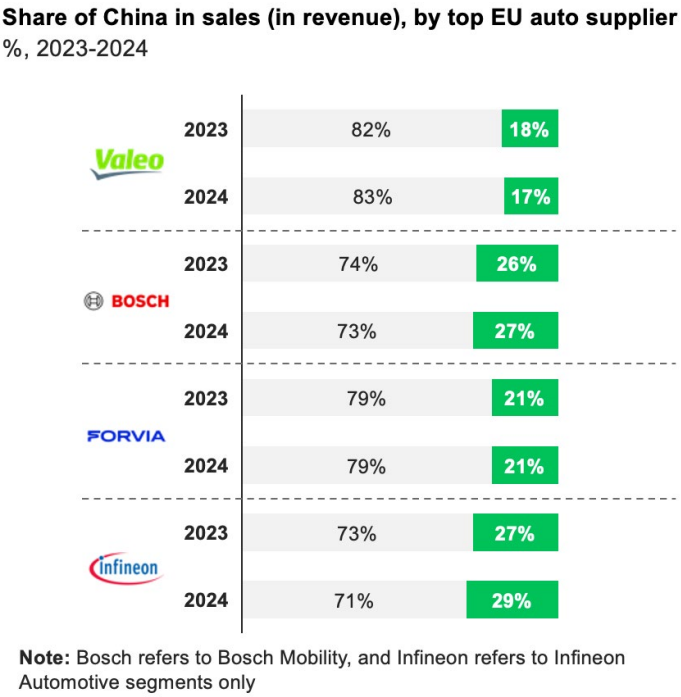
1. Foreign Players: wholly-owned subsidiaries of foreign companies 2. Joint Ventures: joint ventures between Chinese players and foreign players 3. APA: Auto Parking Assistance 4. AD chips: Autonomous driving chips 5. EPS: Electric Power Steering

Sources: Marklines, DWDG analysis

Two integration paths explain this rise. The first is an OEM-centered, horizontal build-out around major groups such as FAW, SAIC and GAC. These manufacturers used JVs with global Tier-1s to localize technology, then scaled affiliated suppliers that evolved from captive units into quasi-independent players. Yanfeng and HASCO illustrate how clustering of engineering, tooling, and testing around OEM hubs steadily raised domestic content and know-how. The second path is deep vertical integration, epitomized by BYD. The group controls much of the value chain from materials and cells to packs, inverters, motors, ECUs, and software, through units such as FinDreams and BYD Semiconductor. This structure shortens development cycles, tightens cost control, reduces reliance on foreign Tier-1s, and gives BYD a ready-made supply base to follow its vehicle plant abroad.

For leading European Tier-1s, the picture is mixed: competitive pressure is rising, yet China remains a pivotal end-market and a major source of vehicle program awards. In 2024, China accounted for 27% of Bosch Mobility revenue, 21% for Forvia, 29% for Infineon Automotive and 17% for Valeo. Even as legacy JV sourcing recedes, the Chinese market still anchors a significant share of global sales for Europe's leading suppliers.

FIGURE 13 - Share of China in total vehicle sales (in revenue), by top European automotive supplier - 2023-2024, (%)



Sources: Valeo, Bosch, Forvia, Infineon

China's advantage is now structural. Regarding batteries, Chinese producers delivered about 1 990 GWh out of 2 400 GWh globally in 2025, roughly 83% of world output, while controlling around 90% of graphite supply and about 70% of cathode active materials. Development speed also tilts the field: leading Chinese programs move from concept to start of production (SOP) in about two years versus three in Europe, with engineering loops and validation cycles markedly compressed. Looking ahead, competition is shifting toward user experience and system integration. The Shanghai 2025 show underscored this pivot: success increasingly hinges on smartphone-grade human-machine interface (HMI), connected services, and vehicle-to-grid readiness, where ecosystems built around Huawei-connected brands and Xiaomi are emerging as pacesetters.

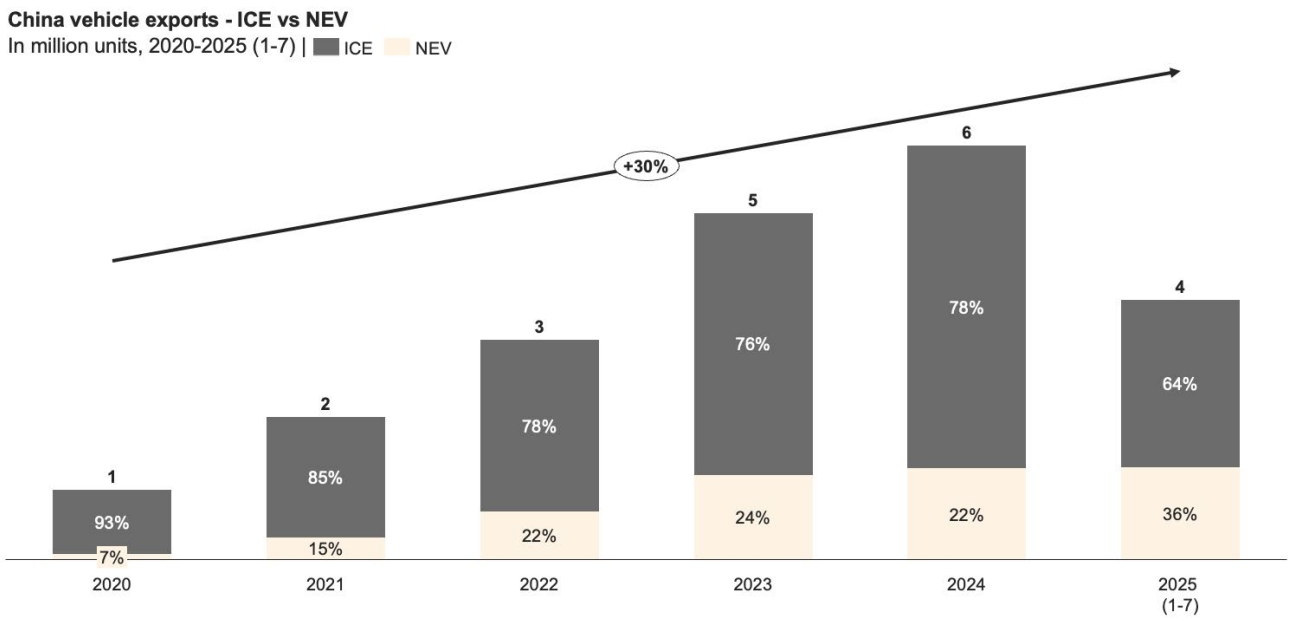
2.3 China's automotive market: a fragmented oversupplied market

China's structural advantages now translate into scale outpacing profitable demand resulting in a crowded field and persistent slack.

More than 150 brands compete in a saturated market, with factories running at about 50% utilization. Overcapacity is sharper in electrics: NEV output is roughly twice domestic demand and already sits well above global demand. Pricing has adjusted accordingly: average prices fell 8.3% in 2024, industry operating margins slipped to 4.4%, and the median net margin among listed automakers was 0.83%. Consolidation looks inevitable. In August 2025, the CEO of Xpeng predicted that as few as five Chinese automakers could remain within five years, signaling a profound reshaping of the landscape.

Against this backdrop, exports have become a structural outlet. China became the world's largest vehicle exporter in 2023, overtaking Germany and Japan, and the momentum continued: shipments reached about 6 million vehicles in 2024 and 4 million in January-July 2025.

FIGURE 14 - China vehicle exports 2020-2025 (1-7), (million units)



Source: Automobility

Europe has emerged as a primary destination, combining volume potential with the prospect of firmer pricing and better margins than the hyper-competitive domestic market. In 2024, the EU-27 accounted for about 15% of China's passenger-car exports, just behind Russia at 18%.

3

CHINESE AUTOMOTIVE PLAYERS IN EUROPE

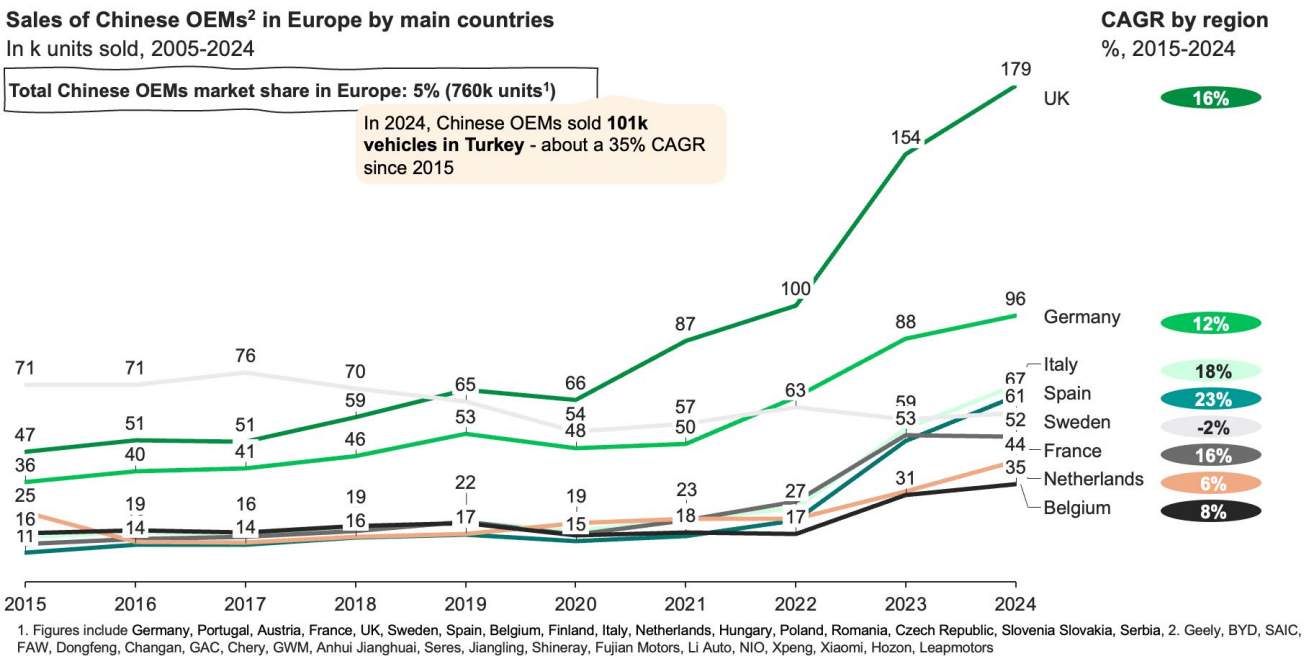
3.1 Chinese OEMs' presence in Europe

Chinese exports increasingly land in Europe - and that pull is now matched by a strategic push to localize. Chinese OEMs are shifting from a pure export play to an embedded presence through brand acquisitions, partnerships, and new plants, turning import share into installed capacity and proximity to customers.

Sales footprint

In 2024, Chinese brands sold around 760 000 vehicles, or about 5% of the European market. The United Kingdom, Germany and Spain were the main entry points, with the UK alone near 180 000 units.

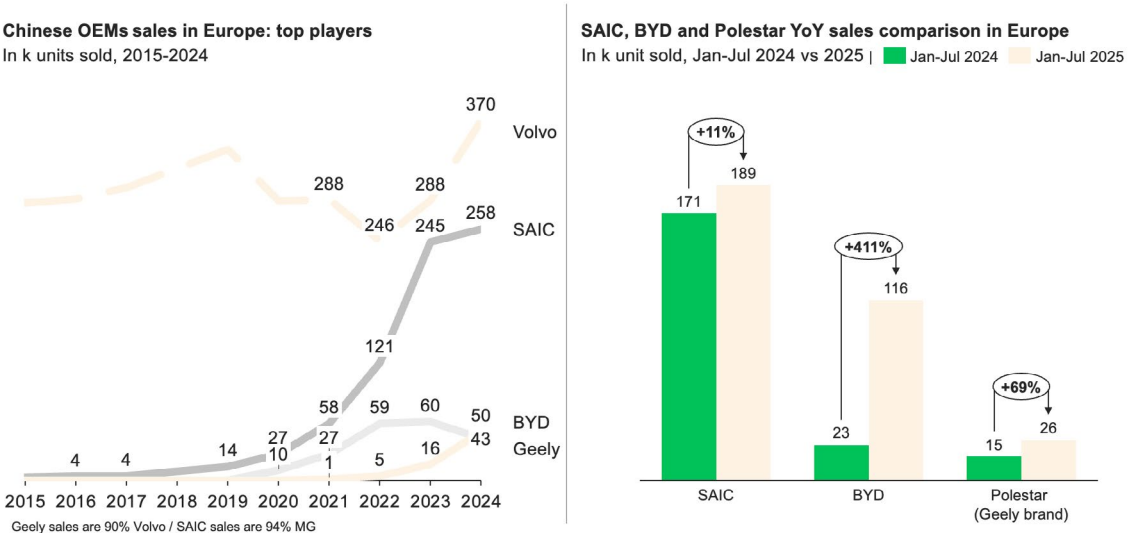
FIGURE 15 - Sale of Chinese OEMs in Europe by country 2005-2024, (k units)



Sources: Marklines, DWDG analysis

Leadership that year rested with SAIC/MG at 258 000 sales, a position built on its 2005 acquisition of the MG brand, followed by BYD with 50 000 sales. Geely sold 43 000 under its own brands, while its European scale is anchored by Volvo, which accounted for about 370 000 sales in 2024. The trend accelerated in 2025: by July, SAIC/MG had already registered about 189 000 vehicles, BYD had multiplied its volumes more than fourfold year-on-year to about 116 000, and Polestar, Geely's EV brand, was up 69%.

FIGURE 16 - Top Chinese OEMs sales in Europe 2015-2024, (k units)



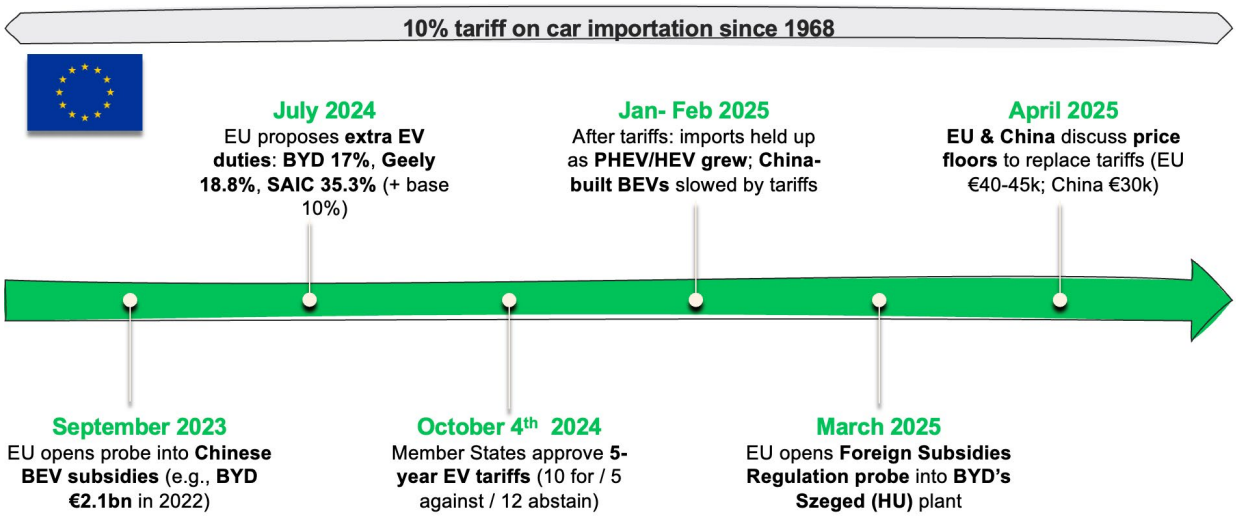
Sources: Marklines, DWDG analysis

Market access and trade measures

After the subsidy investigations, the EU moved beyond the long-standing 10% base tariff and imposed company-specific countervailing duties on China-built BEVs. On 4 October 2024, Member States approved applying these duties for up to five years: ten voted in favor, including France and Italy; five voted against, including Germany and Hungary; twelve abstained, including Spain and Belgium. The allocation stands at 7.8% for Tesla, 17.0% for BYD, 18.8% for Geely, and 35.3% for SAIC, while cooperating manufacturers represent 20.7% and non-cooperating ones 35.3%. All these rates will be added to the 10% MFN duty. Early 2025 shows imports still rising into Europe, led by a surge in plug-in-hybrid electric vehicles (PHEV) while battery electric vehicle (BEV) inflows softened under the tariff regime. In parallel, Brussels and Beijing discussed price floors in spring 2025, with the EU signaling €40-45 000 and Chinese counterparts closer to €30 000, but no binding arrangement has been concluded.

The practical effect so far is a shift from pure export to local production and portfolio localization, rather than a slowdown in Europe.

FIGURE 17 - EU measures on China-built EVs 2023-2025



Sources: Intereconomics, Vie publique - République française

Local production and industrial footprint

To limit tariff risks and reduce landed costs, Chinese automakers are localizing production in receptive markets. BYD will start production in Hungary, although this is mostly an assembly plant, in 2026 with capacity near 200 000 vehicles a year and is adding a site in Turkey of about 150 000, leveraging the EU-Turkey customs union. Chery has launched an approximately 150 000-unit plant in Spain and is exploring the reuse of idle European facilities, including former Volkswagen sites in Germany. Alongside these greenfield moves, partnerships are multiplying: Stellantis with Leapmotor in Eisenach and Ebro with Chery in Barcelona combine assembly, asset reuse, and local branding to narrow landed costs and shorten lead times.

FIGURE 18 - Chinese OEMs production plant construction projects in Europe

State of production plant construction projects

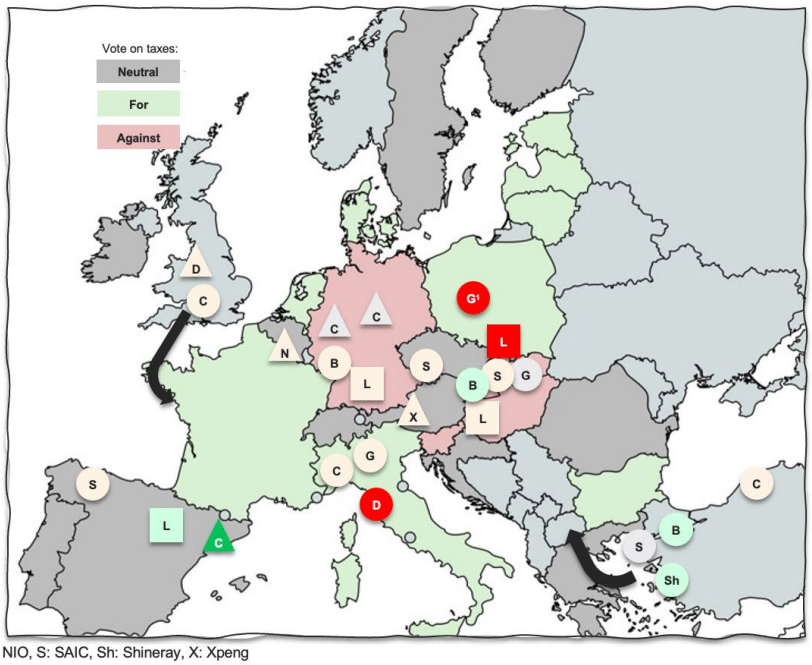
Rumor | Negotiation | In construction | Operational | Cancelled

Construction of brand-new plant | JV | Reuse of existing plant | No tax for vehicles exports

Construction or operational plants annual capacities:
- BYD, Hungary: 200k - 2025 (postponed to 2026)
- BYD, Turkey: 150k - 2026
- Chery, Spain: 150k - 2024
- Shineray, Turkey: 25k - 2026

JVs or potential JVs with European OEMs:
- Stellantis, Eisenach (GE): Leapmotor
- Ebro, Barcelona: Chery

European OEMs' plants potential reuse:
- NIO: Audi plant, Belgium
- Dongfeng: Nissan plant, Sunderland (UK)
- Chery: VW plants, Dresden & Osnabrück (GE)
- Chery: Nissan plant, Barcelona
- Xpeng and GAC: Magna Steyr plant, Austria



B: BYD, C: Chery, D: Dongfeng, G¹:Geely, G: Great Wall, L: Leapmotors, N: NIO, S: SAIC, Sh: Shineray, X: Xpeng

Sources: Desktop research, DWDG analysis

Beyond investment friendliness, a handful of countries serve as strategic entry points. Germany offers a large market, dense supplier networks, and brownfield sites that cut ramp-up time. Hungary combines a 9% corporate tax rate with long tax holidays and a fast-growing battery and manufacturing hub. Turkey provides tariff-free entry to the EU through the customs union and targeted incentives for EV projects. The UK couples sizeable export potential into the EU under the Trade and Cooperation Agreement with substantial public support for EV supply chains. Taken together, these locations simplify logistics, reduce duty exposure, and faster compliance with EU rules.

3.2 Chinese suppliers' presence in Europe

Chinese auto parts suppliers are following the same path as carmakers. Within a few years, they have gained a foothold in Europe through acquisitions, joint ventures, and local factories, and they now cover most of the core systems around European final assembly hubs.

Global rise of Chinese suppliers

The global supplier landscape has shifted markedly over the past decade. In the early 2010s, only one Chinese group appeared among the Top-100 global automotive suppliers by revenue; by 2023, that count had risen to nine. Over the same period, the revenue share of Chinese groups within the Top-100 increased from roughly 1% to about 9%. Leadership in batteries, power electronics and software-centric electronic control (EC) and advanced driver-assistance systems (ADAS) coincided with steady gains in mainstream modules such as interiors, glazing, tires, and metal castings. The combination of cost competitiveness, rising quality and long-standing ties with global OEM programs has broadened their footprint across both the electrified stack and traditional components.

Acquisition of European suppliers

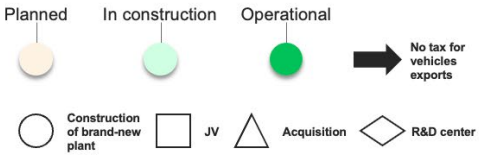
Over the past few years, roughly 40 full or partial acquisitions of European automotive suppliers by Chinese groups have been completed. Examples include CITIC Dicastal's integration of KSM Castings, adding sites in Germany and the Czech Republic; and in 2025, APALT's purchase of ALUNITED in Denmark and France. BHAP expanded via Inalfa in roof systems and later Trimet Automotive in aluminum modules, anchoring production in Germany, France, the Netherlands, and Poland. In 2025, Dongshan Precision moved to acquire France's GMD, reinforcing metal-forming capacity in Europe. In electronics and safety, Joyson absorbed Preh, Joynext and TecniSat, and in 2025, Keboda acquired IMI Czech Republic to localize automotive electronics. These deals compressed time-to-market compared with greenfield builds and locked in long-standing relationships with European OEM programs.

Local manufacturing

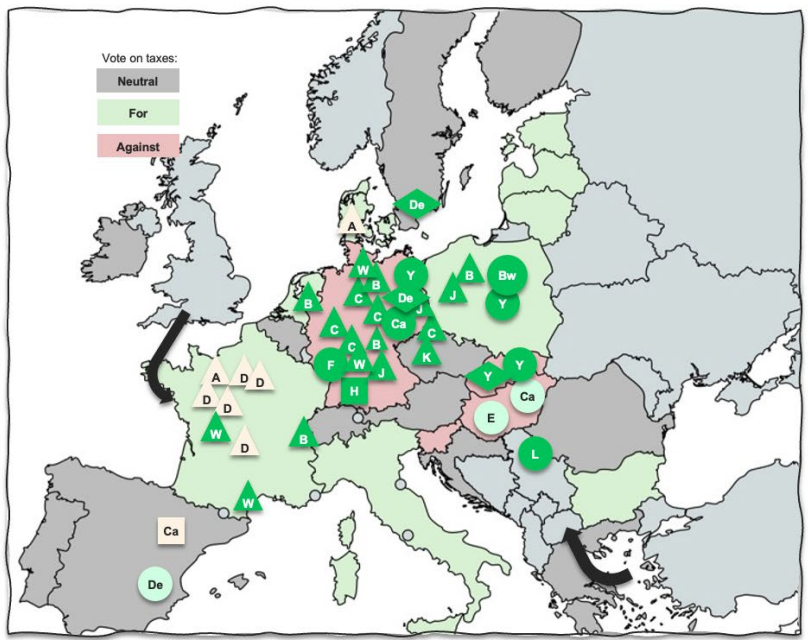
A second path has been local production, through the settlement of wholly owned or JVs in Europe. CATL has produced cells in Erfurt since 2022 and is building a large complex in Hungary. It has also formed a joint venture with Stellantis to develop a large-scale lithium iron phosphate (LFP) gigafactory in Zaragoza. CATL's share of EV battery in Europe rose from 17% in 2021 to 38% in 2024, and to 43-45% in Q1 2025. Other battery players are adding capacity in Central and Eastern Europe, including EVE Energy in Hungary. Beyond batteries, Yanfeng has created a dense interiors and glazing network across Germany, Poland, and Slovakia. Fuyao produces automotive glass in Leingarten and, in 2024, led the global market with 28% market share, ahead of AGC at 23% and Saint-Gobain at 20%. In metals and castings, HASCO of SAIC produces in Germany through KS HUAYU AluTech, a JV with Rheinmetall, while Chinese-owned wheel and casting sites operate under local subsidiaries. Production extends to tires with Linglong in Serbia and chassis and suspension with BWI in Poland, with electronics players such as Desay SV expanding EU R&D, testing and customer-integration centers.

FIGURE 19 - Chinese automotive suppliers' activities in Europe - non exhaustive

Chinese auto suppliers' presence in Europe (non-exhaustive)



- A: APALT - **Aluminum castings**
- B: BHAP - **Roof systems, body modules, interiors**
- Bw: BWI Group - **Chassis**
- Ca: CATL - **EV lithium-ion batteries**
- C: CITIC Dicastal - **Aluminum wheels**
- De: Desay SV - **Electronics**
- D: Dongshan Precision - **Metal stamping & enclosures**
- E: Eve Energy - **EV batteries**
- F: Fuyao - **Auto glass**
- H: HASCO - **Electronics /lighting, castings/chassis**
- J: Joyson - **Electronics & passive safety**
- K: Keboda - **Power electronics & lighting control**
- L: Linglong - **Tires**
- W: Weichai - **Engines & powertrains**
- Y: Yanfeng - **Interiors/seating**



Sources: Desktop research, DWDG analysis

FIGURE 20 - Top global Chinese suppliers' revenues, 2024 (€bn)

	Suppliers	Main products	Activities in Europe *(non-exhaustive)*	Revenue (€bn, 2024)	Revenue CAGR 2020-2024
1	CATL	EV lithium-ion batteries	• Cell production in Germany since 2022 • 100 GWh Hungary plant under construction, expected to start production late-2025/early-2026 • Plant under built in Spain with Stellantis, expected to start production late-2026	32.5[1]	50%
2	HASCO	Interiors/seating (Yanfeng), electronics/lighting, castings/chassis	• Yanfeng plants in Germany, Poland, Slovakia • KS HUAYU AluTech plant in Germany (JV with Rheinmetall)	21.7	6%
3	WEICHAI	Engines & powertrains	• Operations via acquired stakes: KION (Germany), Linde Hydraulics (Germany), Moteurs Baudoin (France), Aradex (Germany)	9.9	-12%
4	通纳川 BHAP	Roof systems, body/chassis modules, interiors	• Operations via acquired stakes: Inalfa Roof Systems (Netherlands), with plants in Netherlands/Germany/Poland/Slovakia	8.9	1%
5	均胜电子 JOYSON ELECTRONICS	Electronics & passive safety	• Operations via acquired stakes: Preh, JOYNEXT, TechniSat (Germany); Joyson Safety Systems (combination of Key Safety System & Takata acquired) EU sites • Plants in Germany and Poland	7.2	4%
6	中信戴卡 CITIC Dicastal	Aluminum wheels	• Operations via acquired stakes: KSM Castings Group (Germany) • Plants in Germany and Czechia	5.5	18%
7	zc rubber	Tires	• EU HQ & Tech Center in Frankfurt (Germany); sales/logistics hub • No EU plants	5.0[1]	9%
8	FY	Auto glass	• Fuyao Europe plant in Leingarten (Germany) - manufacturing/processing (not related to acquisition of SAM Automotive assets in 2019)	5.0	20%
9	SAILUN	Tires	• Sailun Group Europe HQ & R&D in Frankfurt (Germany) • No EU plants	4.1	20%
10	DESAY SV	Electronics	• Operations across Germany (HQ+R&D/testing), Spain (plant under construction), Czechia (office), Sweden (planned office), France (planned office)	3.5[1]	45%

1. Automotive only

Sources: Desktop research, DWDG analysis

OEM-led supply-base built-out

As Chinese automakers localize assembly in Europe, their sourcing is likely to follow. Large, labor-intensive, high-value and difficult-to-transport parts such as seats, bumpers, and cables, are likely to be supplied locally by Chinese Tier-1s or JVs with European partners. Vertically integrated groups can extend their own supply chains as well; BYD through FinDreams could localize battery and power-electronics modules alongside vehicle plants. Smaller and lower-value parts will likely continue to be imported more frequently from China. This pull-through can shift share from incumbent European suppliers around new hubs and squeeze margins.

Given the growing embedded presence of Chinese OEMs and suppliers, the EU should respond constructively: protect fair competition and the industrial base, and durably anchor, a competitive Europe-based value chain.

4

PROPOSED EUROPEAN UNION POLICY MIX FOR A CLEAN INDUSTRIAL TRANSITION

Europe now appears to be entering a “protect-and-learn” phase, comparable - though not identical - to China’s experience in the early 2000s. The EU is not building an automotive ecosystem from scratch; it must restore competitiveness, accelerate capacity-building, and develop a continental value chain, while remaining consistent with its trade commitments. A pragmatic mix can combine time-bound protective measures with clear localization pathways and structured knowledge transfer, sequenced and reviewed over time. Three complementary levers can achieve this alignment: (1) a “Made in Europe” label to steer localization, (2) harmonized rules for foreign direct investment (FDI) and joint ventures (JVs) and (3) potentially as a temporary measure, a time-bound tariff rebalancing mechanism. Each can be anchored in existing EU regulatory frameworks to ensure legitimacy, consistency, and coherence across Member States.

4.1 Establish a “Made in Europe” label to anchor industrial localization and circularity

The EU should introduce a “Made in Europe” label that defines when a vehicle, battery pack, cell, or other strategic component can claim European origin. The label’s scope should evolve over time, with increasingly stringent localization criteria for downstream products. Furthermore, it should combine localization thresholds with other policy objectives (such as carbon footprint, reparability, and circularity indicators). Overall, EU preference and EU content criteria must be progressively integrated into key instruments:

- Supply-side support: conditioning eligibility for EU and Member States funds, such as CAPEX/OPEX aids or preferential energy contracts.
- Demand-side pull: embedding the label within corporate-fleet mandates, public procurement scoring, social leasing schemes, and CO_2-standards crediting thus creating a coherent incentive architecture across the value chain.

The definition of European “content” can draw on existing Rules of Origin (RoO) frameworks used in preferential trade agreements. In practice, the label should be built on Maximum Non-Originating Material (MaxNOM) thresholds, a metric that determines how much non-EU content can be included while still qualifying as “local.” This approach, already embedded in the EU-UK Trade and Cooperation Agreement (TCA), progressively tightens localization requirements over time (e.g., MaxNOM limits falling from 70% to 30%) and differentiates between critical inputs. Such a framework provides a tested blueprint for designing European content rules that are both ambitious and practical.

The “Made in Europe” labels for both vehicles and batteries should therefore adopt a mixed approach that combines:

- Value-based criteria (e.g., Bill of Materials (BoM) based MaxNOM per component) to minimize administrative burden and align with industrial support mechanisms.
- Component-specific localization thresholds, increasing progressively for key products such as battery cells, cathode active materials, and battery management systems, following the Net-Zero Industry Act (NZIA) list of strategic components and extending to e-motos, power electronics and software.
- Circularity and repairability indicators, embedding recycled or EU-originating scrap materials in the calculation of local content, ensuring consistency with the EU’s broader green and circular economy objectives, and preventing resource “leakage.”

THE KEY ASPECT OF THE SCOPE AND DEFINITION OF A MADE IN EU LABEL

To be truly effective in both protecting and supporting the EU industry, the "Made in Europe" label should be defined at the vehicle level (and not a binary criterion based on the yearly average sales by OEM), with separate and dedicated criteria for strategic components such as batteries. Approaches based on OEM-level average sales without distinguishing between vehicles and strategic components should be prohibited, as they are inherently counterproductive.
Indeed, basing local content on OEM average sales implies to qualify an OEM as "European", which presents three major risks:

1. **Fiscal and fleet-management incentives become ineffective,** as distinctions based solely on OEM brand cannot be justified in tax schemes.
2. **Criteria risk being diluted:** each Member State will push for its national OEM to meet the label, creating pressure for continual revisions whenever an OEM risks becoming non-compliant.
3. **Responsibility shifts to commercial and supply strategy rather than the upstream engineering and industrial strategy:** compliance would depend on sales management and performance rather than on specific model development phases and related decision processes (design and engineering stages, components procurement through the suppliers list, or manufacturing/ final assembly localization). These are the strategic steps when the value associated to Made in EU label must be leverageable, to then be embedded as a project objective and as part of the project economics for each car produced. Car to car labels (as opposed to fleet label based on average of yearly sales) is the only way to have concrete impacts on the OEMs strategy and on the resilience of the European industry.

At the same time, it is crucial to establish dedicated criteria for batteries, a nascent strategic industry to provide investors with the visibility they need to secure long-term agreements with European suppliers.

To operationalize this metric, the EU should define clear local content valuation methodologies. To prevent future offshoring, vehicles should have a local content level of 80%[1], and strategic components should be produced in the EU. Real monitoring of value-added offers the most accurate measure of local economic contribution, but it requires substantial reporting and verification infrastructure. Alternatively, pre-defined value-added coefficients per segment (for example, 20% for cathode active materials within a cell) provide a simpler, ex-ante metric for aid allocation, though they risk misalignment if not properly benchmarked. A balanced option would combine modelled value-added for up-front eligibility with ex-post verification or audits, ensuring both efficiency and integrity.

By embedding these elements, EU preference and EU content requirement can evolve as a common yardstick across industrial, environmental, and trade policies, aligning with the Net-Zero Industry Act (NZIA), the Critical Raw Materials Act (CRMA), and the Clean Industrial Deal. Over time, increasingly stringent localization thresholds and circularity requirements would make the label both a mark of industrial competitiveness and a guarantee of strategic autonomy, reinforcing the EU's leadership in the global green industrial transition.
Embedding circularity principles within the label, such as recycled material use (processed in the EU for a genuine circular economy) and end-of-life recovery, will align industrial localization with the EU's broader green and circular transition goals.

1 https://gerpisa.org/node/8350

4.2 Define a more coordinated sectoral Foreign Direct Investment (FDI) and Joint Ventures (JVs) framework, aligned with strategic autonomy and just transition goals

The conditioning of FDI and JVs in the automotive sector to specific criteria, such as technology transfers, is a pivotal challenge that must be addressed in the future regulatory framework. A more coordinated FDI and JV framework could ensure that foreign investments and partnerships in strategic sectors, such as batteries, contribute to European industrial capacity rather than displace it. FDI screening should remain open to international players, but with conditionality ensuring that cooperation translates into embedded know-how (including in industrial ramp-up) and durable European value creation. Importantly, this should not be limited to Chinese players as there are other prevalent players (such as South Korean or Japanese companies) that have this technological knowledge.

There is a need to establish a harmonised EU FDI regime for the Automotive sector to prevent fragmentation and allow precise screening criteria to be defined, related to specific industrial or strategic stakes, and applied on a mandatory basis.

Conversely, the ongoing revision of the EU FDI Screening Regulation (2019/452) presents a limited opportunity to harmonize investment governance in strategic sectors across Member States. The current trialogue negotiations center on the allocation of decision-making authority between the EU and national levels, the degree of harmonization required for screening criteria, as well as the scope of investments subject to screening and the delineation of sensitive sectors. However, a cross-sectoral FDI framework will remain at the discretion of Member States, leading to risks of both fragmentation and circumvention.

A robust framework for FDI and JVs would serve as a crucial safeguard, although it would be applied on a case-by-case basis. For example, if authorization were required for all FDI in a strategic sector, the decision to either reject the investment or impose conditions would not be automatic. Instead, it would follow a tailored assessment of each project, based on criteria defined by both EU and national legislation. The degree of harmonization in these filtering criteria is therefore central but also presents a limitation. Depending on the discretion granted to Member States, some may adopt a more lenient approach than others, potentially leading to inconsistencies in enforcement.

Therefore, to be even more effective, FDI screening (applicable to investments and investors) should be coherent with eligibility criteria for a project and then products to obtain a “Made in Europe” label and the favorable measures attached to it (e.g., access to a dedicated strategic fund, access to lead markets). Both are part of a toolbox to ensure that Europe climbs the learning and industrial curve and therefore obtains a strategic autonomy. As an example, eligibility criteria for label benefits or public support should also require that the supported projects from JVs meet specific governance and localization standards, including balanced shareholder structures with safeguards for European partners; R&D localization and clear intellectual property (IP) ownership rules; technology-transfer boundaries with defined opt-out, step-in, and buy-out mechanisms.

These principles should also encourage friend shoring of upstream value chains through strategic partnerships, such as those under the Critical Raw Materials Act (CRMA) through the Global Gateway strategy while “homeshoring” critical downstream manufacturing critical to the resilience and transition of the EU automotive supply chain, such as cell and cathode production.

Such alignment of FDI, local content, and industrial policy tools mirroring global practices creates value through access to EU lead markets while ensuring a level playing field between European and international actors on environmental and social objectives. In this context, combining FDI with associated advantages and local content obligations could form the basis of a mutually beneficial ("win–win") trade and industrial cooperation framework, for instance, with China. Such an approach would provide secure and structured access to investment opportunities within Europe, a relatively stable and captive market where returns on investment currently tend to be higher than in China.

4.3 Rebalance tariffs as a temporary strategic shield and negotiation lever

To safeguard emerging strategic industries and maintain fair competition, the EU could temporarily rebalance tariffs on vehicles and critical components. Europe appears to apply relatively modest border protection compared with other major markets. China-built BEVs face company-specific countervailing duties of about 7% to 35% in addition to the 10% MFN car tariff, while most parts still face base duties around 3 to 5%. Across the Atlantic, the United States set a far more restrictive stance, with duties well above 100% on Chinese EVs. For historical context, China itself applied very high tariffs before WTO accession, about 80-100% on imported vehicles and roughly 40-50% on many automotive parts pre-WTO, then lowered them progressively.

A calibrated EU rebalancing would narrow landed-price gaps on vehicles and critical sub-systems such as battery cells, packs, e-motors, inverters, ADAS controllers and can be justified under WTO rules (e.g., safeguard measures, CVDs). Measures should be temporary, rule-based, and subject to due-process trade remedies, with time-bound reviews and clear de-escalation criteria as European content and productivity rise. The objective is not to shut out competition, but to buy learning time, curb tariff-arbitrage incentives and support the scale-up of capacity in Europe.

Importantly, this should be conceived as a temporary rebalancing mechanism that could act as a negotiation lever in trade dialogues, with the aim of securing reciprocity and aligning global competition with shared environmental and social standards. One may argue that such measures could generate additional production costs for cars placed on the European market, potentially slowing down the transition by delaying the adoption of more efficient technologies or energy sources. However, there is evidence that significant margins of maneuver exist within industrial and commercial policy frameworks, as well as in regulatory instruments, to redirect supply toward more affordable and resource-efficient products. For instance, a study by IMT has demonstrated how producing small cars in France is relevant and possible from a competitivity standpoint and this perspective was recently reaffirmed by the President of the European Commission, Ursula von der Leyen, in her 2025 State of the Union address. She emphasized the importance of promoting the development of small, affordable electric vehicles manufactured in Europe through European and Member State regulatory and budgetary initiatives.

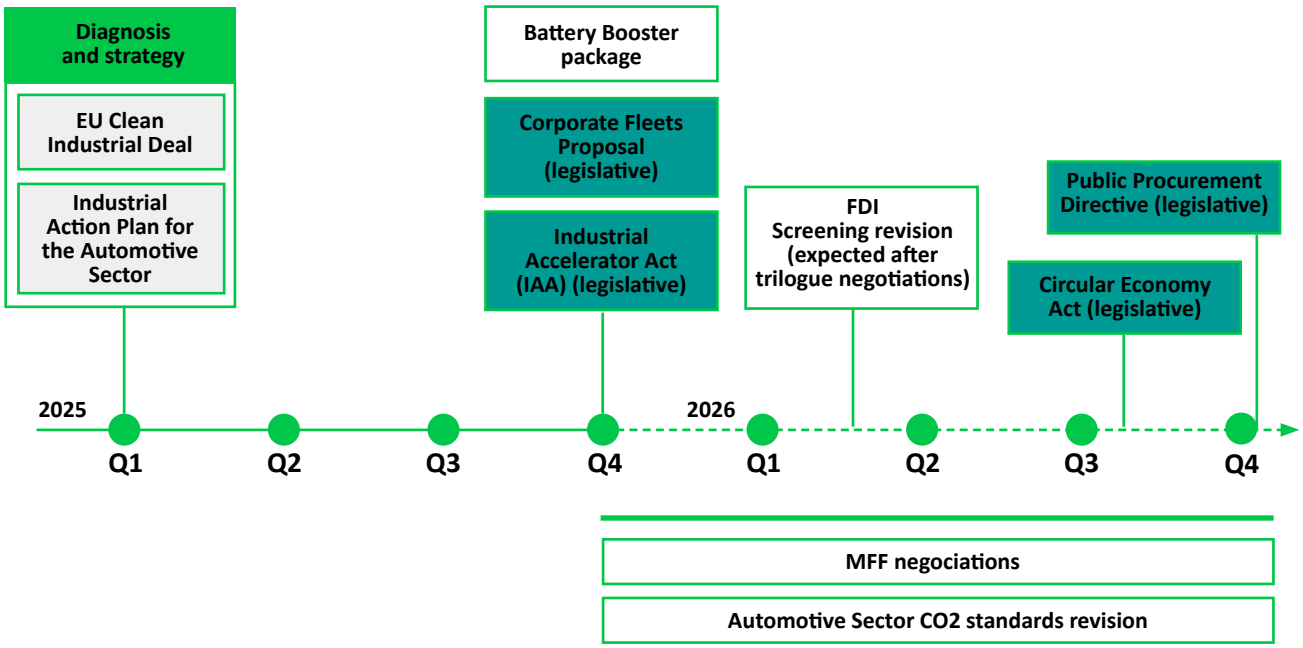
4.4 Policy vehicles to implement the proposed measures

These three levers, defining a “Made in Europe” label and harmonized JV/FDI governance and potential temporary tariff rebalancing, can mutually reinforce each other if embedded coherently in the EU regulatory architecture. Leveraged jointly, they can:

- Support decarbonization through localization of low carbon manufacturing
- Advance circularity by developing domestic closed-loop supply chains that embed recycled content criteria into industrial standards
- Strengthen European preference by rewarding European value creation across the supply chain and therefore safeguard the future of the automotive industry in Europe, responsible for almost 13 millions of jobs (ACEA, 2024)

The figure below depicts the future policy vehicles that can anchor such measures into the EU agenda.

FIGURE 21 - Policy vehicles



Sources: IMT analysis

CONCLUSION

Comparable local-content regimes and industrial safeguards are used worldwide. By giving value to a "Made in Europe" label - through eligibility for support and access to a European lead market - and by coupling it with time-bound tariff rebalancing and outcome-based joint-venture rules, the EU sets fair terms of entry, accelerates learning and anchors capabilities, IP, and skilled jobs on European soil, while remaining open to international partnerships. The objective is not to close Europe, but to restore competitiveness and ensure that cooperation translates into durable European strength where interests align.

Ensuring the long-term viability of this approach requires a parallel focus on structural fundamentals. Cost competitiveness must improve through access to reliable and affordable energy, calibrated labor policies, and long-term financing. Advancing battery sovereignty will hinge on consolidating European cell manufacturing and localizing upstream activities such as materials processing, refining, and recycling. Simultaneously, innovation must be scaled through mission-oriented programs, growth capital tied to clear eligibility criteria, and shared pilot infrastructures with enforceable rules on intellectual property and data.

To operationalize this strategy, Europe's "protect-and-learn" phase should combine time-bound protective measures with measurable localization pathways. Instruments such as a "Made in Europe" label, harmonized sectoral FDI and JV frameworks, and a temporary, rule-based tariff rebalancing mechanism can anchor this transition within existing EU regulatory frameworks and environmental and social objectives. Together, they would promote circularity, ensure fair competition, and channel foreign investment into durable European value creation.

Execution mechanisms must remain measurable and reversible: explicit milestones for local content, R&D, workforce development, and supplier participation should guide periodic reviews and allow the gradual withdrawal of protections as European capabilities mature. Transparent auditing and public reporting will be essential to sustain credibility.

Collectively, these elements form a pragmatic "protect-and-learn" strategy, one that attracts investment, embeds technological know-how, imposes high environmental and social ambition, and turns openness into lasting European strength in the next phase of the global automotive transition.

All the above recommendations have to be embedded in a continuous dialogue with key stakeholders of the automotive sector. It must be a platform to discuss opportunities of cooperation, with Asian counterparts, as well as part of a broader engagement with global actors and countries.